

APPENDIX D.

TRAIL ACRONYMS AND GLOSSARY

TRAIL ACRONYMS

The following list of commonly used acronyms can assist trails and greenway managers and advocates decipher the "alphabet soup" of trails.

4X4	Four-Wheel Drive Vehicle
AT	American Trails
ATV	All Terrain Vehicle
ASSHTO	American Association of State Highway and Transportation Officials
ACSA	American Council of Snowmobile Associations
ADA	Americans with Disabilities Act
AHS	American Hiking Society
BCHA	Back Country Horsemen of America
BCHM	Back Country Horsemen of Montana
BLM	Bureau of Land Management
CCC	Civilian Conservation Corps
CDNST	Continental Divide National Scenic Trail
CE	Categorical Exclusion (NEPA & MEPA process)
CFR	Code of Federal Regulations
CTEP	Community Transportation Enhancement Program
CORPS	United States Army Corps of Engineers
DNRC	Department of Natural Resources and Conservation
DOI	Department of Interior
EA	Environmental Assessment
EIS	Environmental Impact Statement
EPA	Environmental Protection Agency
FHWA	Federal Highway Administration
FWP	Fish, Wildlife & Parks
FY	Fiscal Year (Federal FY is from October 1 to September 30)
GIS	Geographical Information System
GPS	Global Positioning System
IMBA	International Mountain Bicycling Association
ISTEA	Intermodal Surface Transportation Efficiency Act of 1991
LCNHT	Lewis and Clark National Historic Trail
LWCF	Land and Water Conservation Corps
MCC	Montana Conservation Corps
MEPA	Montana Environmental Policy Act
MIC	Motorcycle Industry Council
MUTCD	Manual of Uniform Traffic Control Devices
MDOT	Montana Department of Transportation
MOU	Memorandum of Understanding
MSA	Montana Snowmobile Association
MTVRA	Montana Trail Vehicle Riders Association
MUTCD	Manual on Uniform Traffic Control Devices
NASTA	National Association of State Trail Administrators
NEPA	National Environmental Policy Act
NHT	National Historic Trail
NOHVCC	National Off Highway Vehicle Conservation Council
NPNHT	Nez Perce National Historic Trail
NPS	National Park Service
NRT	National Recreation Trail
NTD	National Trails Day

NTSA	National Trails System Act, 16 USD 1241 et seq.
OHV	Off-highway vehicle
ROD	Record of Decision (NEPA & MEPA process)
ROS	Recreation Opportunity Spectrum
ROW	Right-of-way
RTC	Rails-to-Trails Conservancy
RTCA	Rivers, Trails and Conservation Assistance Program of the National Park Service
SCORP	Statewide Comprehensive Outdoor Recreation Plan
SHPO	State Historic Preservation Office
STIP	Statewide Transportation Improvement Program
STP	Surface Transportation Program
TEA-21	Transportation Equity Act for the 21 st Century
TIP	Transportation Improvement Program
USDA	United States Department of Agriculture
USDI	United States Department of the Interior
USFS	United State Forest Service
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
UTAP	Universal Trail Assessment Process

GLOSSARY OF TRAIL TERMS

Abutment: Structure at either extreme end of a bridge that supports the superstructure (sill, stringers, trusses, or decks) composed of stone, concrete, brick, or timber.

Access Trail: Any trail that generally connects the main trail to a road or another trail system.

Accessible: A term used to describe a site, building, facility, or trail that complies with the ADA Accessibility Guidelines and can be approached, entered, and used by people with disabilities.

Adopt-A-Trail: A program in which groups or businesses “adopt” trails, providing volunteer work parties at periodic intervals to help maintain the trail. Though no special trail privileges are granted, the trail manager generally acknowledges that a trail has been “adopted” by erecting signs saying the trail is part of an Adopt-A-Trail program and including the name of the adopter.

Alignment: The layout of the trail in horizontal and vertical planes. This is to say, the bends, curves, and ups and downs of the trail. The more the alignment varies, the more challenging the trail.

Americans with Disabilities Act of 1990 (ADA): A federal law prohibiting discrimination against people with disabilities. Requires public entities and public accommodations to provide accessible accommodations for people with disabilities.

Americans with Disabilities Act Accessibility Guidelines (ADAAG): Design guidelines for providing access to a range of indoor and outdoor settings by people with disabilities.

Angle: Angle is measured with a straight vertical as 90° and a straight horizontal as 0°. A grade of 100% would have an angle of 45°.

Apron: One of the three main elements of a waterbar. It catches water running down the trail and directs it off. Apron is also the transition area on a switchback (also called the “landing”).

Archaeological Resources: Any material of past human life, activities, or habitation that are of historic or prehistoric significance. Such material includes, but is not limited to, pottery, basketry, bottles, weapon projectiles, tools, structures, pit house, rock paintings, rock carving, graves, skeletal remains, personal items and clothing, household or business refuse, or any piece of the foregoing.

Archaeological Site: A concentration of material remains of past human life or activities that is of historic or prehistoric significance and that has been surveyed by a qualified archeologist.

Armoring: Reinforcement of a surface with rock, brick, stone, concrete, or other “paving” material.

Asphalt (Macadam): Petroleum-based surface material that provides a smoothly paved surface that is suitable for bicycles and in-line skates. It is preferred in urban areas where trails are often used for commuting to and from work or school.

All-Terrain-Vehicle (ATV): A small four-wheeled vehicle equipped with low-pressure balloon tires and intended for off-highway use only.

At-Grade Crossing: A trail crossing a roadway on the same plane.

Backslope: The cut bank along the uphill side of the trail extending upward from the tread. Usually sloped back by varying degrees, depending on bank composition and slope stability.

Ballast: Stone, cinders, gravel, or crushed rock fill material used to elevate a railroad bed above the surrounding grade, to provide proper drainage and a level surface for the ties and rails.

Barrier-Free Design: A trail design that promotes the elimination of physical barriers that reduce access to areas by people with disabilities.

Base: The primary excavated bed of a trail upon which the tread, or finished surface lies.

Base Course: The layer or layers of specified material of designed thickness placed on a trailbed to support surfacing.

Bed: The excavated surface on which a trail tread lies.

Bench Cut: A relatively flat, stable surface (tread) on a hill side occurring naturally or by excavation. When excavated often referred to as full or half bench.

Berm: The ridge of material formed on the outer edge of the trail which projects higher than the center of the trail tread.

Blaze: A trail marker. Blazes can be made on a tree by chipping away a piece of the bark and painting the chipped out part with a 2-inch by 6-inch, vertical rectangle. Plastic triangles or diamonds (known as blazers) with the name of the trail or a directional arrow imprinted can be purchased and nailed to trees to mark a trail route.

Boardwalk: A fixed planked structure, usually built on pilings in areas of wet soil or water to provide dry crossings.

Bog: A wetland typified by wet, spongy ground that is poorly drained with vegetation including sedges, sphagnum, and other wetland species.

Bollard: A barrier post, usually 30 to 42 inches in height, used to inhibit vehicular traffic at trail access points.

Bridge: A structure, including supports, erected over a depression (stream, river, chasm, canyon, or road) and having a deck for carrying trail traffic. If the structure is two feet above the surface the bridge should have railings.

Brushing: To clear the trail corridor of plants, trees, and branches which could impede the progress of trail users.

Brushing-In (Obliteration): To pile logs, branches, rocks, or duff along the sides of the tread to keep users from widening the trail, or to fill in a closed trail with debris so that it will not be used.

Buffer Zone: Natural area or open space used between the trail and adjacent lands to minimize impacts (physical or visual).

Bushwhack: Off-trail travel.

Cairn: A constructed mound of rock located adjacent to a trail used to mark the trail route. Used in open areas where the tread is indistinct.

Carrying Capacity: The number of recreationists that can be accommodated in a specific area based on ecological, physical, facility, and/or social factors.

Categorical Exclusion (CE): A technical exclusion for projects that do not result in significant environmental impacts. Such projects are not required to prepare environmental reviews.

Check Dam: Log, rock, or wood barrier placed in deeply eroded trails or erosional channels to slow the flow of water to allow accumulation of fine fill material behind it.

Clearing: Removal of windfall trees, uproots, leaning trees, loose limbs, wood chunks, etc. from both the vertical and horizontal trail corridor.

Clearing Height (Vertical Clearance): The vertical dimension which must be cleared of all tree branches and other obstructions that would otherwise obstruct movement along the trail.

Clearing Width (Limit): The outer edges of clearing areas (cleared of trees, limbs, and other obstructions) as specified by trail use.

Climbing Turn: A turn which is constructed on a grade of 20% or less when measured between the exterior boundaries of the turn and follows the grade as it changes the direction of the trail 120 to 180 degrees.

Collector Ditch: A drainage structure that intercepts water flowing toward a trail and usually channeled underneath the trail through a culvert.

Concrete: A composition of coarse and fine aggregates, portland cement, and water, blended to give a hard, unyielding, nearly white pavement which can be finished to any degree of smoothness.

Connectivity: The ability to create functionally contiguous blocks of land or water through linkage or similar ecosystems or native landscapes; the linking of trails, greenways, and communities.

Construction: Building a trail where no trail previously existed.

Contour, Lines: A line on a topographic map connecting points of the land surface that have the same elevation.

Contour Trail: Trail constructed such that it follows a contour, with it's elevation remaining constant.

Corduroy: A rustic form of puncheon using native logs (3 to 5' in length) laid parallel on wet saturated ground and covered with a tread of soil. Corduroy typically rots out quickly.

Corridor, Scenic: Land set aside on either side of a trail to act as a buffer zone protecting the trail against impacts such as logging or development which would detract from the quality and experience of a trail.

Corridor, Trail: The full dimensions of a route, including the tread and a zone on either side (usually three feet) and above the tread from which brush will be removed.

Course: An even layer of stones, similar to a course of bricks, that form a foundation, intermediate layer, or cap stone layer in a stone wall.

Cribbing (Cribwall, Retaining Wall): Rock or log reinforcement structure to support trail tread or retain backslope along steep trails that are at risk from erosion.

Cross Section (Typical Cross Section or Typical): Diagrammatic presentation of a trail or path profile which is at right angles to the centerline at a given location.

Crowned Trail: A trail bed built up from the surrounding area (and sloped for drainage) usually by excavating trenches parallel to the trail.

Crusher Fines (Crusher Run, Crushed Stone): Refers to any limestone, granite, or gravel that has been run through a crusher that is used to form a hard tread surface which once wetted and compacted creates a smooth trail surface for high-use areas.

Culvert, Cross Drainage: Pipelike or boxlike construction of wood, metal, plastic, or concrete that passes under a trail to catch surface water from side ditches and direct it away from a trail.

Culvert, Stream Bed: Pipelike or boxlike construction of wood, metal, plastic, or concrete that passes under a trail to convey a stream under a crossing without constricting waterflow.

Cushion Material: Native or imported material, generally placed over rocky sections of unsurfaced trail to provide a usable and maintained traveled way.

Cut and Fill: The process of removing soil from one area and placing it elsewhere to form a base for any given activity.

Deadfall: A tangled mass of fallen trees or branches.

Decking (Flooring): That part of a bridge, puncheon, or boardwalk structure that provides direct support for trail traffic.

Designated Trail: A trail that is approved and maintained by an agency.

Difficulty Rating: A subjective rating of trail difficulty based on an average user with average physical abilities. For example the US Forest Service uses Easy, More Difficult, Most Difficult. Many other agencies use the following:

- Easy is defined as relaxing, posing minimal difficulties and able to be traveled with little physical effort.
- Moderate is defined as not requiring excessive or extreme physical effort.
- Difficult is defined as physically strenuous requiring excessive or extreme physical effort.

Digging-Tamping Bar: A long bar with a small blade at one end for loosening compacted or rocky soil and a flattened end for tamping.

Dike (Tramway, Tram, Levee): An embankment or dam made to prevent flooding by the sea, a river/stream, or lake. The embankment is often used for a trail.

Dispersed Recreation: Recreation activities that occur outside of developed recreation facilities away from traveled roads. Also referred to as *backcountry recreation*.

Ditch: A long, narrow trench used to improve drainage.

Destination Trail: A trail that connects two distinct points (A to B) rather than returning the user to the original beginning point.

Ditching, Sidehill: A ditch which parallels the treadway on the uphill side to collect water seeping into the trail, usually ends in a drainage ditch which allows the water to cross the trail.

Double-Track Trail: A trail that allows for two users to travel side by side or make passes without one user having to yield the trail. Double-track trails are often old forest roads.

Downslope: The downhill side of the trail. Avoid damaging downslope vegetation that is stabilizing hillside soil.

Drainage, Cross: Running water in swamps, springs, creeks, drainages, or draws that the trail must cross.

Drainage, Sheet: Desirable condition in which water flows in smooth sheets rather than rivulets; shower flow and less concentration results in less erosion.

Drainage, Surface: Rain or snow runoff from the surface of the tread.

Drainage Dip: An erosion-control technique that reverses the grade of a trail for a distance of 15-20 feet before returning to the prevailing grade. The abrupt change in grade forces water to run off the trail tread, rather than gaining additional velocity.

Easement, Conservation: Places permanent restrictions on property in order to protect natural resources.

Easement, Construction: An additional area or corridor needed to construct a trail or facility.

Easement, Maintenance: An additional area or corridor (not open to the public) needed to maintain trail drainage, foliage, and recurring maintenance needs.

Easement, Recreation: Provides public access to private property while limiting or indemnifying the owner's public liability.

Easement, Scenic: Places permanent restrictions on a property in order to protect the natural view.

Elevation: The height of a place above sea level.

Enhancement Funds: Under TEA-21, independent funds for bicycling and walking facilities, rail-trails, and eleven other activities.

Environmental Assessment (EA): A document prepared early in a planning process that evaluates the potential environmental consequences of a project or activity. An assessment includes the same topical areas as an EIS, but only assesses the effects of a preferred action, and in less detail than an EIS. An EA results in a decision, based on a assessment of the degree of impact of an action, that an EIS is necessary, or that an action will have no significant effect and a finding of no significant impact (FONSI) can be made.

Environmental Impact Statement (EIS): An EIS is a full disclosure, detailed report which establishes the need for the proposed action, identifies alternatives with the potential to meet the identified need, analyzes the anticipated environmental consequences of identified alternatives, and discusses how adverse effects may be mitigated. An EIS is prepared in two stages: a draft statement which is made available to the public for review and a final statement which is revised on the basis of comments made on the draft statement.

Erosion: Natural process by which soil particles are detached from the ground surface and moved downslope, principally by the actions of running water. The combination of water falling on the trail, running down the trail, and of freezing and thawing, and the wear and tear from traffic create significant erosion problems on trails.

Erosion, Sheet: The removal of a fairly uniform layer of soil material from the land surface by the action of rainfall and runoff water.

Fall Line: Direction water flows down a hill. A high use trail should never be constructed on the fall line of a hill.

Fines, soil: Smallest soil particles important for binding the soil together; silt; fines are often the first particles to move when erosion takes place.

Fiscal Year (FY): Annual schedule for keeping financial records and for budgeting funds. The state fiscal year runs from July 1 - June 30 while the federal fiscal year is October 1 – September 30.

Flagline: Flagging tied to trees indicating the intended course of a trail prior to construction.

Floodplain: The flat, occasionally flooded area bordering streams, rivers, or other bodies of water susceptible to changes in the surface level of the water.

Flora: The plant populations and species of a specified region.

Ford: A natural water level stream crossing improved (aggregate mix or concrete) to provide a level low velocity surface for safe traffic (mainly saddle or pack animal) passage.

Geographic Information System (GIS): A spatial database mapping system that can be used to contain location data for trails and other important features.

Geotextile (Geo-synthetics, Geofabrics): A semi-impervious nonwoven petrochemical fabric cloth that provides a stable base for the application of soil or gravel. Most common use is in the construction of turnpikes.

Global Positioning System (GPS): A system use to map trail locations using satellites and portable receivers. Data gathered can be downloaded directly into GIS database systems.

Grade: Slope expressed as a percentage (feet change in elevation for every 100 horizontal feet, commonly known as “rise over run”). A trail that rises 8 vertical feet in 100 horizontal feet has an 8% grade. Grade is different than angle; angle is measured with a straight vertical as 90° and a straight horizontal as 0°. A grade of 100% would have an angle of 45°.

Grade, Maximum: The steepest grade permitted on any part of a trail.

Grade, Sustained: The steepest grade permitted over the majority of the trail length.

Grade Dip, Rolling (Coweta Dip): A reverse in the grade of the trail accompanied by an angling outslope that will divert water off the trail.

Grade-Separated Crossing: Overpasses or tunnels that allow trail users to cross a railroad right-of-way or street at a different level than trains or traffic.

Greenbelt: A series of connected open spaces that may follow natural features such as ravines, creeks, or streams. May surround cities and serve to conserve and direct urban and suburban growth.

Hardening: The manual, mechanical, or chemical compaction of the trail tread resulting in a hard and flat surface that sheets water effectively and resists the indentations that are created by use.

Headwall: Support structure at the entrance to a culvert or drainage structure.

Hydrology: The properties, distribution and circulation of water on the surface of the land, in the soil and underlying rocks, and in the atmosphere.

Intermodal: A mode is a particular form of transportation, such as automobile, transit, bicycle, walking. Intermodal refers to connections between modes.

Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA): Federal legislation authorizing highway, highway safety, transit, and other surface transportation programs from 1991 through 1997. It provided new funding opportunities for sidewalks, shared use paths, and recreational trails. ISTEA was superseded by the Transportation Equity Act for the 21st Century (TEA-21).

Interpretation: Communicating information about the natural and/or cultural resources and their associated stories and values found at a specific site or along a trail. Tours, signs, brochures, and other means can be used to interpret a particular resource.

Invasive Exotic: Non-native plant or animal species that invades an area and alters the natural mix of species.

Invitee: A person who has been invited to use the property by the owner for the mutual benefit of the owner and invitee.

Kiosk: A structure housing informational or interpretive displays.

Leave No Trace (LNT): Educational program designed to instill behaviors in the outdoors that leave minimum impact of human activities or occupation.

Licensee: Person using a property with the implied or stated consent of the owner but not for the benefit of the owner.

Limits of Acceptable Change (LAC): A planning framework that establishes explicit measures of the acceptable and appropriate resource and social conditions in wilderness settings as well as the appropriate management strategies for maintaining or achieving those desired conditions.

Loop Trails: Designing trail systems so that the routes form loops, giving users the option of not traveling the same section of trail more than once on a trip.

Maintenance: Work that is carried out to keep a trail in its originally constructed serviceable standard. Usually limited to minor repair or improvements that do not significantly change the trail width, surface, or trail structures.

Measuring Wheel (Cyclometer): An instrument that measures circular arcs. A device that records the revolutions of a wheel and hence the distance traveled by a wheel on a trail or land surface.

Memorandum of Understanding/Agreement (MOU or MOA): A signed, written agreement entered into by various governmental agencies and nonprofit groups to facilitate the planning, coordination, development, and maintenance of a trail or trails system.

Mitigate: Actions undertaken to avoid, minimize, reduce, eliminate, or rectify the adverse impact from a management practice or impact from trail users.

Monitor: Check systematically or scrutinize for the purpose of collecting specific data in relation to a set of standards.

Montana Environmental Policy Act (MEPA): The Act was passed in 1971 and sets out requirements for state agencies to coordinate state plans, functions and resources that have impact on the human environment. NEPA is the counterpart at the federal level.

Multimodal: Facilities serving more than one transportation mode or transportation network comprised of a variety of modes.

Multiple Use Area: A land management objective seeking to coordinate several environmental, recreational, economic, historical, cultural and/or social values in the same geographic area in a compatible and sustainable manner.

Multiple-Use (Multi-Use) Trail: A trail that permits more than one user group at a time.

National Environmental Policy Act (NEPA): Established by Congress in 1969, NEPA requires public involvement and assessment of the biological and cultural resources in the location of the proposed activity. Any ground-disturbing activity on Federal land will require a NEPA analysis of some kind.

National Historic Trail: Extended trails which closely follow original routes of nationally significant travel (explorers, emigrants, traders, military, etc.). The Iditarod, the Lewis and Clark, the Mormon Pioneer, and the Oregon trails were the first to be designated as National Historic Trails.

National Recreation Trail: Existing local trails (over 800) recognized by the federal government as contributing to the National Trails System.

National Scenic Trail: Extended trails that provide for the maximum outdoor recreation potential and for the conservation and enjoyment of the significant qualities of the areas through which they pass. The Appalachian and the Pacific Crest trails were the first to be designated as National Scenic Trails.

National Trails System: A network of trails (National Scenic, Historic, or Recreation) throughout the country authorized by the National Trails System Act (16 U.S.C. 1241-51).

Negative Grade: Trail runs downhill.

Off-Highway Vehicle (OHV): A self propelled vehicle used for recreation or cross-country travel on public lands, trails, easements lakes, rivers or streams. The term includes but is not limited to motorcycles, quadricycles (ATVs), dune buggies, amphibious vehicles, air cushion vehicles, and any other means of land transportation deriving motive power from any source other than muscle or wind".

Outslope (Outsloping): A method of tread grading that leaves the outside edge of a hillside trail lower than the inside to shed water. The outslope should be barely noticeable—usually no more than about one inch of outslope for every 18 inches of tread width.

Pedestrian: Any person traveling by foot or any mobility-impaired person who uses a wheelchair, whether operated manually or motorized.

Pitch: An increase in the prevailing grade of a trail, used during construction to avoid an obstacle, to catch up with the intended grade, or to meet a control point.

Positive Grade: Trail runs uphill.

Puncheon (Bog Bridge): A log or timber structure built on the ground for the purpose of crossing a boggy area. Usually consists of sills, stringers, decking, and often a soil or loose gravel tread laid on top of decking.

Radius: An arc or curve which connects two straight trail segments in order to provide smooth horizontal and vertical alignment.

Rail Corridor: The path of a railroad right-of-way, including the tracks and a specified tract of land on either side of the tracks (generally one hundred feet wide).

Rail-Trail (Rail-to-Trail): A multi-purpose public path (paved or natural) created along an inactive rail corridor.

Rail-with-Trail: A trail which shares the same corridor with active rail traffic.

Railbank(ing): Retaining a rail corridor for future railroad uses after service has been discontinued. The National Trails System Act, Sec. 8d, provides for interim public use of the corridor, allowing the establishment of recreational trails.

Realignment: The process of moving a portion of an existing trail to alleviate maintenance problems or resource impact.

Reconstruction: Building a trail on a new location to replace an existing trail.

Record of Decision (ROD): Also called a decision memo. The portion of a Final Environmental Impact Statement that identifies the proposed action, signed by the appropriate deciding officer.

Recreation Opportunity Spectrum (ROS): A means of classifying and managing recreational opportunities based on physical, social, and managerial settings.

Recreational Stock: Pack and saddle stock used primarily for transporting recreationists and their gear. Both commercial pack stock and individual stock are included. Usually horses and mules, but may also be llamas or goats.

Recreational Use Statute: State laws designed to limit the liability of public organizations, easement donors, landowners, and others who open their lands for public recreation use.

Rehabilitation: All work to bring an existing trail up to its classification standard on the same location, including necessary relocation of minor portions of the trail.

Relocation (Relo): Construction of a new section of trail to replace an old stretch—to avoid problems of erosion or impact, or due to landowner or management constraints.

Renovation: Activities that will significantly change the trail width, surface, or trail structures.

Reroute: To alter the path of a trail to better follow land contours, avoid drainage sites, bypass environmentally sensitive areas, improve views, or for other reasons.

Retaining Wall (Revetments, Cribbing): Structure used at a grade change to hold the soil on the up-hillside from slumping, sliding, or falling, usually made of log or stone. Also used to provide stability and strength to the edge of a trail.

Right-of-Way: A strip of land held in fee simple title, or an easement over another's land, for use as a public utility for a public purpose. Usually includes a designated amount of land on either side of a trail that serves as a buffer for adjacent land uses.

Riparian Zone: The land and vegetation immediately adjacent to a body of water, such as a river, lake, or other natural perpetual watercourse.

Riprap: Stones placed randomly on a bank to provide support.

Rise and Run: A measurement of grades and slopes, expressed as a proportion of the amount of vertical rise in a given horizontal run. For example, "1:4" means that the grade or slope rises 1 unit for each 4 units of horizontal run. Taking this one step further, 1:4 is a 25% grade or slope, where 25% is obtained by dividing 1 by 4 and expressing the result as a percentage.

Road, Level 1, U.S. Forest Service: Level 1 roads are typically not open for traffic. Road maintenance includes basic custodial care to protect resources, maintain drainage and runoff patterns.

Road, Level 2, U.S. Forest Service: Level 2 roads are open for limited passage of traffic. Traffic normally minor and composed of one or a combination of administrative use, permitted use or specialized traffic. Road maintenance includes basic custodial care to protect resources, maintain drainage and runoff patterns, logging out and brushing out as necessary to provide passage.

Shared Use: The shared use concept contends land managers and trail user groups work together to identify common goals and share in the process to achieve them. It means sharing of knowledge, tools, trailheads, grant funds, labor, and other resources in an area. In some instances it means sharing the same trail, but doesn't always require multiple-use trails.

Side Trails: Dead-end trail which access features near the main trail.

Sidehill: Where the trail angles across the face of a slope. The tread is often cut into the slope.

Sideslope: The natural slope of the ground measured at right angles to the centerline of the trail, or the adjacent slope which is created after excavating a sloping ground surface for a trailway, often termed a cut-and-fill-slope, left and right of the trail tread.

Sign, Kiosk: A freestanding bulletin board consisting of three to five sides.

Single-Track Trail: A trail only wide enough for one user to travel and requires one user to yield the trail to allow another user to pass.

Single Use Trail: One that is designed and constructed for only one intended user (i.e. hiker use only).

Slope, Cross: The slope that is perpendicular to the direction of the trail.

Slope, Percent: Number of feet rise (vertical) divided by feet of run (horizontal) times 100 to get percent slope; example: 15-feet of rise over 100-feet of run is a 15% slope.

Social Trail (Wildcat, Way, Informal): Unplanned/unauthorized trails/paths that developed informally from use and are not designated or maintained by an agency.

Soil Cement (cement-treated base): A mixture of pulverized soil combined with measured amounts of portland cement and water and compacted to a high density. As the cementing action occurs through hydration, a hard, durable semi-rigid material is formed. It must have a seal coat to keep out moisture and a surface that will take wear.

Soil Profile: Site specific arrangement of soil layers from surface to bedrock.

Soil Stabilizer: Material, either natural or manufactured, used to hold soil in place and prevent erosion from water, gravity, or trail users. Stabilizers include soil cement, geogrid, etc.

Spine Trail: A regional trail that acts as a "backbone" to a regional trail system.

Spur Trail: A trail that leads from primary, secondary, or spine trails to points of user interests—overlooks, campsites, etc.

Stile: A step or set of steps for passing over a fence or wall for hikers without allowing livestock to get out.

Surfacing: Material placed on top of the trailbed or base course that provides the desired tread. It lessens compaction of soil, provides a dry surface for users, and prevents potential erosion and abrasion.

Sustainability: Community use of natural resources in a way that does not jeopardize the ability of future generations to live and prosper.

Switchback: A sharp turn in a trail to reverse the direction of travel and to gain elevation. It is constructed on a slope of more than 15 percent when measured between the exterior boundaries of the trail 120 to 180 degrees. The landing is the turning portion of the switchback. The approaches are the trail sections upgrade and downgrade from the landing.

Trail: Linear route on land or water with protected status and public access for recreation or transportation purposes such as walking, jogging, hiking, bicycling, horseback riding, mountain biking, canoeing, kayaking, backpacking, and vehicular travel by motorcycle, all-terrain vehicles or snowmobiles.

Trailbed: The finished surface on which base course or surfacing may be constructed. For trails without surfacing, the trailbed is the tread.

Trailhead (Staging Area): An access point to a trail often accompanied by various public facilities, such as a horse unloading dock or chute, parking areas, toilets, water, directional and informational signs, and a trail use register.

Transportation Enhancement: Projects that include: providing bicycle and pedestrian facilities; converting abandoned railroad rights-of-way into trails; preserving historic transportation sites; acquiring scenic easements; mitigating the negative impacts of a project on a community by providing additional benefits; and other nonmotorized projects.

Transportation Equity Act for the 21st Century (TEA-21): Federal legislation authorizing highway, highway safety, transit, and other surface transportation programs from 1998 through 2003. It provides funding opportunities for pedestrian, bicycling, and public transit facilities, and emphasizes intermodalism, multimodalism, and community participation in transportation planning initiated by ISTEA.

Tread (Treadway): The actual surface portion of a trail upon which users travel excluding backslope, ditch, and shoulder. Common tread surfaces are native material, gravel, soil cement, asphalt, concrete, or shredded recycled tires.

Tread Width: The width of the portion of the trail used for travel.

Turnout: A place where the trail is widened to permit trail traffic traveling in opposite directions to pass.

Turnpike (Turnpiking): Tread made stable by raising trail bed above wet, boggy areas by placing mineral soil over fabric between parallel side logs or rocks (along edge of tread). Usually includes ditches alongside the logs or rocks. Turnpike must be "crowned" to provide drainage.

Universal Trail Assessment Process (UTAP): An inventory process that can be used by trail managers to assess a trail to determine compliance with design guidelines and to provide objective information to trail users regarding grade, cross slope, tread width, surface, and obstacles.

Waterbar: A drainage structure for turning water composed of an outsloped segment of tread leading to a barrier placed at a 45 % angle to the trail, usually made of logs, stones, or rubber belting material. Water flowing down the trail will be diverted by the outslope or, as a last resort, by the barrier.